



6/11/02 119  
Box 524  
Docket No.: 20731 US (C38435/120940)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Akira ASAKURA *et al.* )

Serial No.: 09/938,035 )

Examiner: Not Yet Assigned

Filed: August 23, 2001 )

Art Unit: 1651

For: **MICROBIAL PROCESS FOR  
PRODUCING L-ASCORBIC ACID, D-  
ERYTHORBIC ACID, AND SALTS  
THEREOF** )

**RECEIVED**

AUG 20 2002

TECH CENTER 1600/2900

New York, NY  
August 12, 2002

**RESPONSE TO NOTICE TO COMPLY WITH REQUIREMENTS  
FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE  
SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES**

Commissioner for Patents  
U.S. Patent and Trademark Office  
BOX SEQUENCE  
P.O. Box 2327  
Arlington, VA 22202

Sir:

This is in response to the NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES ("Notice") mailed June 11, 2002, which set a two-month shortened statutory period to respond. The due date for reply to the Notice is August 12, 2002 because August 11, 2002 fell on a Sunday. 35 U.S.C. § 21(b); 37 C.F.R. § 1.7 and 1.8. Accordingly, this response is filed timely upon mailing with an executed Certificate of Mailing on or before August 12, 2002. (37 C.F.R. § 1.8). It is not

believed that this response occasions any fee, but should there be any fee, please charge the same to Deposit Account No. 02-4467. A duplicate copy of this sheet is enclosed.

Please amend the application as follows:

#### **IN THE SPECIFICATION**

Please cancel the Sequence Listing on pages 41-43 of the original application and renumber the specification accordingly. Please enter the substitute Sequence Listing set forth in Exhibit A on the next page after the section entitled Abstract.

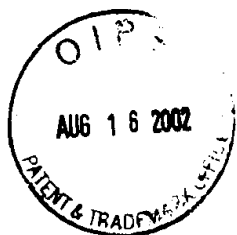
#### **REMARKS**

In the Notice, it is asserted that the content of the computer readable form ("CRF") of the Sequence Listing submitted with the response of May 7, 2002 does not comply with the requirements of 37 C.F.R. §§ 1.821 through 1.825. (See Notice at page 1). In particular, it is asserted that the use of the term "n" was detected in the Sequence Listing and that such term must be defined in the <220> and <223> sections of the Sequence Listing. (See "Raw Sequence Listing Error Summary" on page 4 of the Notice). A copy of the Notice is attached hereto as Exhibit B.

In response to the Notice, a paper copy and a CRF of a substitute Sequence Listing are attached hereto, respectively, as Exhibits A and C.

believed that this response occasions any fee, but should there be any fee, please charge the same to Deposit Account No. 02-4467. A duplicate copy of this sheet is enclosed.

Please amend the application as follows:



**IN THE SPECIFICATION**

Please cancel the Sequence Listing on pages 41-43 of the original application and renumber the specification accordingly. Please enter the substitute Sequence Listing set forth in Exhibit A on the next page after the section entitled Abstract.

**REMARKS**

In the Notice, it is asserted that the content of the computer readable form ("CRF") of the Sequence Listing submitted with the response of May 7, 2002 does not comply with the requirements of 37 C.F.R. §§ 1.821 through 1.825. (See Notice at page 1). In particular, it is asserted that the use of the term "n" was detected in the Sequence Listing and that such term must be defined in the <220> and <223> sections of the Sequence Listing. (See "Raw Sequence Listing Error Summary" on page 4 of the Notice). A copy of the Notice is attached hereto as Exhibit B.

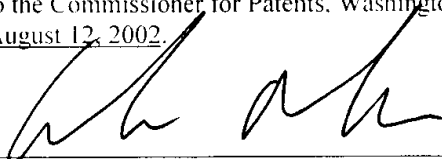
In response to the Notice, a paper copy and a CRF of a substitute Sequence Listing are attached hereto, respectively, as Exhibits A and C.

Pursuant to 37 CFR § 1.821(f), undersigned counsel hereby represents that, upon information and belief, the content of the paper and computer readable Sequence Listings enclosed herewith are the same, and no new matter has been added.

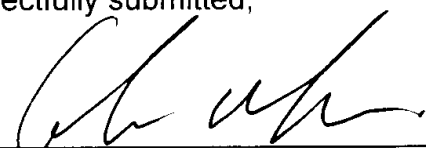
It is believed that the Sequence Listing presented herewith places the captioned application into compliance with the requirements set forth in 37 CFR § 1.821. Entry of the Sequence Listing is respectfully solicited.

If the Examiner wishes to discuss any part of this submission, please contact the undersigned at the number indicated.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Commissioner for Patents, Washington, D.C. 20231, on August 12, 2002.

  
\_\_\_\_\_  
Gonzalo Merino

Respectfully submitted,

By: \_\_\_\_\_

Gonzalo Merino  
Registration No. 51,192  
BRYAN CAVE LLP  
245 Park Avenue  
New York, New York 10062  
(212) 692-1800

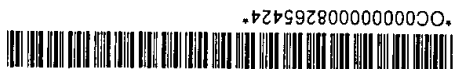
**RECEIVED**  
AUG 20 2002

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COMMISSIONER FOR PATENTS  
UNITED STATES PATENT AND TRADEMARK OFFICE  
WASHINGTON, D.C. 20231  
www.uspto.gov

|                    |            |                     |            |                       |               |                        |                          |
|--------------------|------------|---------------------|------------|-----------------------|---------------|------------------------|--------------------------|
| APPLICATION NUMBER | 09/938,035 | FILING/RECEIPT DATE | 08/23/2001 | FIRST NAMED APPLICANT | Akira Asakura | ATTORNEY DOCKET NUMBER | 20731 US (C38435/120940) |
|--------------------|------------|---------------------|------------|-----------------------|---------------|------------------------|--------------------------|

CONFIRMATION NO. 1662  
FORMALITIES LETTER



\*00000000008265424\*

Date Mailed: 06/11/2002

# **NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES**

Applicant is given **TWO MONTHS FROM THE DATE OF THIS NOTICE** within which to file the items indicated below to avoid abandonment. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked-up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

For questions regarding compliance to these requirements, please contact:

- For Rules Interpretation, call (703) 308-4216
- To Purchase Patent Software, call (703) 306-2600
- For Patent Software Program Help, call (703) 306-4119 or e-mail at [patin2help@uspto.gov](mailto:patin2help@uspto.gov) or [patin3help@uspto.gov](mailto:patin3help@uspto.gov)

*A copy of this notice MUST be returned with the reply.*

Customer Service Center  
Initial Patent Examination Division (703) 308-1202  
PART 1 - ATTORNEY/APPLICANT COPY

*[Handwritten signature]*

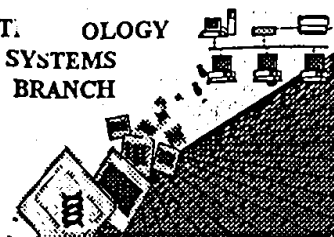


UNITED STATES PATENT AND TRADEMARK OFFICE



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BIOTECHNOLOGY  
SYSTEMS  
BRANCH

5/12

**RAW SEQUENCE LISTING  
ERROR REPORT**

TECH CENTER 1600/2900

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/938,035A  
Source: OIP  
Date Processed by STIC: 5-23-02

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

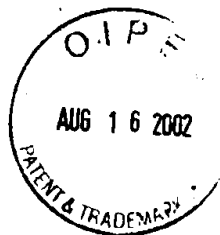
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:  
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202  
Or  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

AMC – Biotechnology Systems Branch – 06/04/2001



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AUG 20 2002

Does Not Comply  
Corrected Diskette Needed

TECH CENTER 1600/200



O.I.P.E.

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/938,035A

DATE: 05/23/2002

TIME: 18:06:05

Input Set : A:\seq list-20731,RocheVit.txt

Output Set: N:\CRF3\05232002\I938035A.raw

3 <110> APPLICANT: Roche Vitamins AG  
 5 <120> TITLE OF INVENTION: Microbial process for producing L-ascorbic acid and  
 6 D-erythorbic acid  
 8 <130> FILE REFERENCE: Alicyclobacillus NA20, 21, FJ21 16S nuc  
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/938,035A  
 C--> 11 <141> CURRENT FILING DATE: 2001-08-23  
 13 <150> PRIOR APPLICATION NUMBER: EP Application No. 00118059.5  
 14 <151> PRIOR FILING DATE: 2000-08-23  
 16 <160> NUMBER OF SEQ ID NOS: 3  
 18 <170> SOFTWARE: PatentIn Ver. 2.1

## ERRORED SEQUENCES

98 <210> SEQ ID NO: 3  
 99 <211> LENGTH: 1495  
 100 <212> TYPE: DNA  
 101 <213> ORGANISM: Alicyclobacillus sp.  
 103 <220> FEATURE:  
 104 <221> NAME/KEY: rRNA  
 105 <222> LOCATION: (1)..(1495)  
 106 <223> OTHER INFORMATION: FJ-21 Partial 16SrRNA gene sequence  
 108 <400> SEQUENCE: 3  
 109 aggacgaacg ctggcggcgt gcctaataca tgcaagtcga gcggaccctct tctgagggtca 60  
 110 gcggcgggacg ggtgaggaac acgtgggtaa tctgcctttc agaccggaat aacgcccgga 120  
 111 aacgggcgct aatgcgggat acgcccgcga ggaggaatct tcttcgggg aaaggcccga 180  
 W--> 112 ttggggccgct gagagaggag cccgcggcgc attagcctgt tggcggggta acggcccacc 240  
 113 aaggcgacga tgcgtagccg acctgagagg gtgaccggcc aactggggac tgagacacgg 300  
 114 ccagactcc tacgggaggc agcagtaggg aatcttccgc aatgggcgca agcctgacgg 360  
 115 agcaacgcgc cgtgagcgaa gaaggccttc gggttgtaa gctctgttgc tcggggagag 420  
 116 cgcatgagg agtggaagc cccatgcgag acggtaccga gtgaggaagc cccggctaac 480  
 117 tacgtgccag cagccgcggt aaaacgtagg gggcgagcgt tgtccggaat cactgggcgt 540  
 118 aaaggtgctg taggcggtcg agcaagtctg gagtgaagc ccatggctca accatgggat 600  
 119 ggctctggaa actgcttgac ttgagtctg gagaggcaag ggaattcca cgtgtagcgg 660  
 120 tgaatgcgt agagatgtgg aggaatacca gggcggaagg cgccttgctg gacagtgact 720  
 121 gacgtgagg cagcaaagcg tggggagcaa acaggattag atacctggt agtccacgcc 780  
 122 gtaaacgatg agtgctaggt gttgggggga cacaccccag tgccgaagga aaccaataa 840  
 123 gcaactccgc tggggagtag ggtcgcaaga ctgaaactca aaggaattga cgggggcccg 900  
 124 cacaagcagt ggagcatgtg gtttaattcg aagcaacgcg aagaacctta ccagggcttg 960  
 125 acatccctct gacgggtgca gagatgcacc ttcccttcgg gcagaggag acagggtgtg 1020  
 126 catggttgct gtcagctcgt gtcctgagat gttgggttca gtcccgaac gagcgcaacc 1080  
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 128 ggaggaaggc ggggatgacg tcaaatcatc atgccctga tgtcctgggc tacacacgtg 1200

see item # 9  
 on ERROR SUMMARY  
 SHEET



## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/938,035A

DATE: 05/23/2002

TIME: 18:06:05

Input Set : A:\seq list-20731,RocheVit.txt

Output Set: N:\CRF3\05232002\I938035A.raw

129 ctacaatggg cggtacaaag ggagggcgaag ccgcgaggcg gagcgaaacc caaaaagccg 1260  
130 ctcgtagttc ggattgcagg ctgcaactcg cctgcatgaa gccggaattg ctagtaatcg 1320  
131 cggatcagca tgccgcggtg aatacgttcc cgggccttgt acacaccgcc cgtcacacca 1380  
132 cgagagtcgg caacaccgga agtcggtgag gtaacccgga aaggggagcc agccgccgaa 1440  
133 ggtgggggtcg atgattgggg tgaagtcgta acaaggtagc cgtaccggaa ggtgc 1495

E--&gt; 136 1

E--&gt; 139 1

Remove extra material at end  
of file

## VERIFICATION SUMMARY

DATE: 05/23/2002

PATENT APPLICATION: US/09/938,035A

TIME: 18:06:06

Input Set : A:\seq list-20731,RocheVit.txt

Output Set: N:\CRF3\05232002\I938035A.raw

L:10 M:270 C: Current Application Number differs, Replaced Application Number  
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:34 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:180  
L:47 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:960  
L:54 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:1380  
L:73 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:180  
L:112 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:180  
L:127 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:1080  
L:136 M:254 E: No. of Bases conflict, this line has no nucleotides.  
M:254 Repeated in SeqNo=3